cinedeck EXTREME

USER GUIDE

WARNING: Take care of your Cinedeck EXTREME as you would your cameras or other electronic equipment. Take care especially to keep water and moisture away from the unit. Getting your Cinedeck EXTREME wet will void the warranty.

WARNING: The Cinedeck EXTREME needs ventilation for safe operation. DO NOT block the fan at the rear of the unit. DO NOT lay the unit down on its back, thereby blocking the fan. Blocking the fan will damage the unit, causing it to overheat, and it will void the warranty.

MORE INFORMATION IS AVAILABLE AT WWW.CINEDECK.COM/WARRANTY

Welcome to Cinedeck EXTREME.

Let's get started.

To begin, check that you have all the components that are included with your Cinedeck EXTREME kit:

Cinedeck EXTREME

Pelican Case

ESATA/USB SSD Dock

ESATA/USB SSD Dock Power Supply

ESATA Cable

USB Cable

Breakout Cable for Analog Video, Analog Audio

Cinedeck Power Supply and LEMO Connector (Localized)

Stylus

1 Mini-to-Mini HDMI Cable

2 Single-Channel Analog Audio Breakout Cable

System Restore USB Thumb Drive

TOUR THE CINEDECK EXTREME AT WWW.CINEDECK.COM/OVERVIEW

POWERING UP

We recommend powering up your Cinedeck EXTREME via the AC adapter the first time. Confirm that your AC Adapter is set to 19 Volts. Then connect the AC adapter to the LEMO connector which connects to the Cinedeck EXTREME.

To safely disconnect the LEMO connector from the device, you must slide the sleeve of the connector and then gently tug to remove the connector from the Cinedeck EXTREME.

IMPORTANT: There is a SAFETY LOCK on the LEMO connector to prevent it being accidentally removed from the Cinedeck EXTREME. DO NOT pull any part of the AC Adapter other than the sleeve.

NOTE: It is possible to switch between the AC Adapter and the batteries without turning off the Cinedeck EXTREME.

TURNING THE CINEDECK EXTREME ON:

The POWER BUTTON is located on the i/o panel on the left side of the Cinedeck EXTREME.

Press the POWER button and a green light will appear indicating it is ON. A blue light on the bottom right hand corner on the front of the Cinedeck EXTREME will also be illuminated.

The Cinedeck EXTREME boots in approximately 30 seconds.

LOADING THE SSD MEDIA

On the i/o panel on the right side of the Cinedeck EXTREME, you will see the slot for the SSD media. Slide the SSD into the slot with the SSD connectors facing towards you.

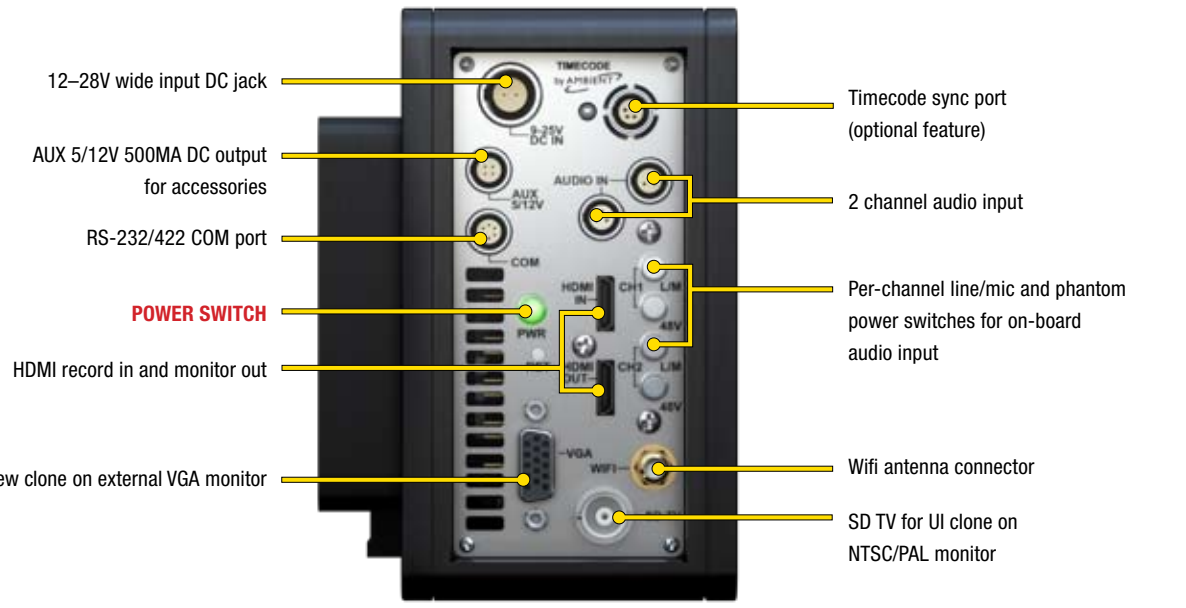
NOTE: An SSD is not included in the Cinedeck EXTREME kit. It must be purchased separately. Please email us at orders@cinedeck.com for more information.

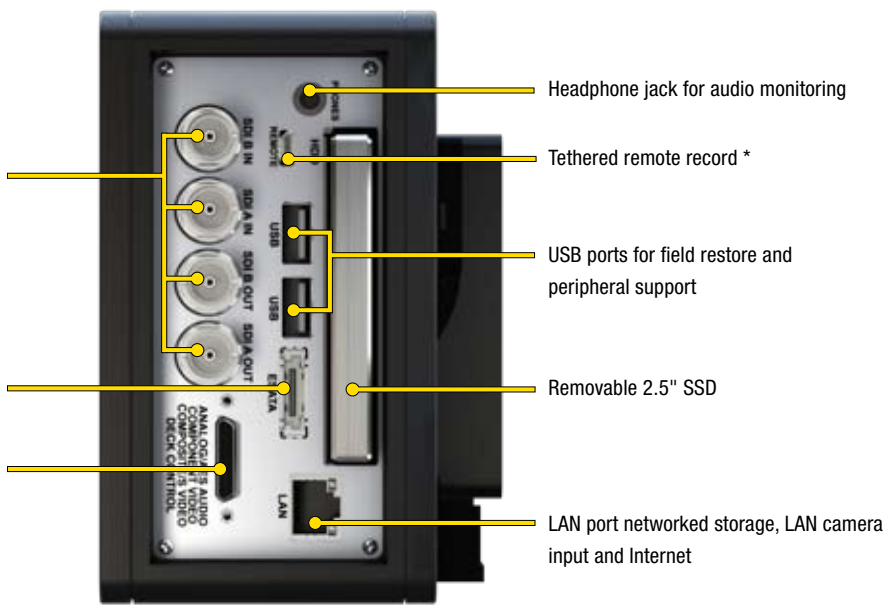
Once the Cinedeck EXTREME recognizes the SSD, media information will appear in the upper right hand corner of the screen.

WARNING: Only SSD media purchased from Cinedeck are ready to use. Other SSDs must be prepared following the directions on page 9 to prevent error and data loss.

INPUTS AND OUTPUTS

VIDEO AT WWW.CINEDECK.COM/INOUT


12–28V wide input DC jack
AUX 5/12V 500MA DC output for accessories
RS-232/422 COM port
POWER SWITCH
HDMI record in and monitor out
VGA for UI/preview clone on external VGA monitor
Timecode sync port (optional feature)
2 channel audio input
Per-channel line/mic and phantom power switches for on-board audio input
Wifi antenna connector
SD TV for UI clone on NTSC/PAL monitor


Dual link/3G HDSDI in and out
ESATA with port multiplier and RAID support
Digital/analog audio, component video, composite video, and RS 422 deck control* via breakout cable
Headphone jack for audio monitoring
Tethered remote record *
USB ports for field restore and peripheral support
Removable 2.5" SSD
LAN port networked storage, LAN camera input and Internet

*PLANNED

CAMERA SYNC & SETUP (SETUP SCREEN)

After booting up, the Cinedeck EXTREME will load the main (RECORD) screen. Locate and tap the **setup** button on the lower right of the touchscreen. This launches the Cinedeck SETUP screen, shown below.

Be sure your camera is connected to the Cinedeck EXTREME and is sending a signal to the appropriate output. Verify the resolution and framerate of the signal in order to sync the camera with the Cinedeck EXTREME and record.

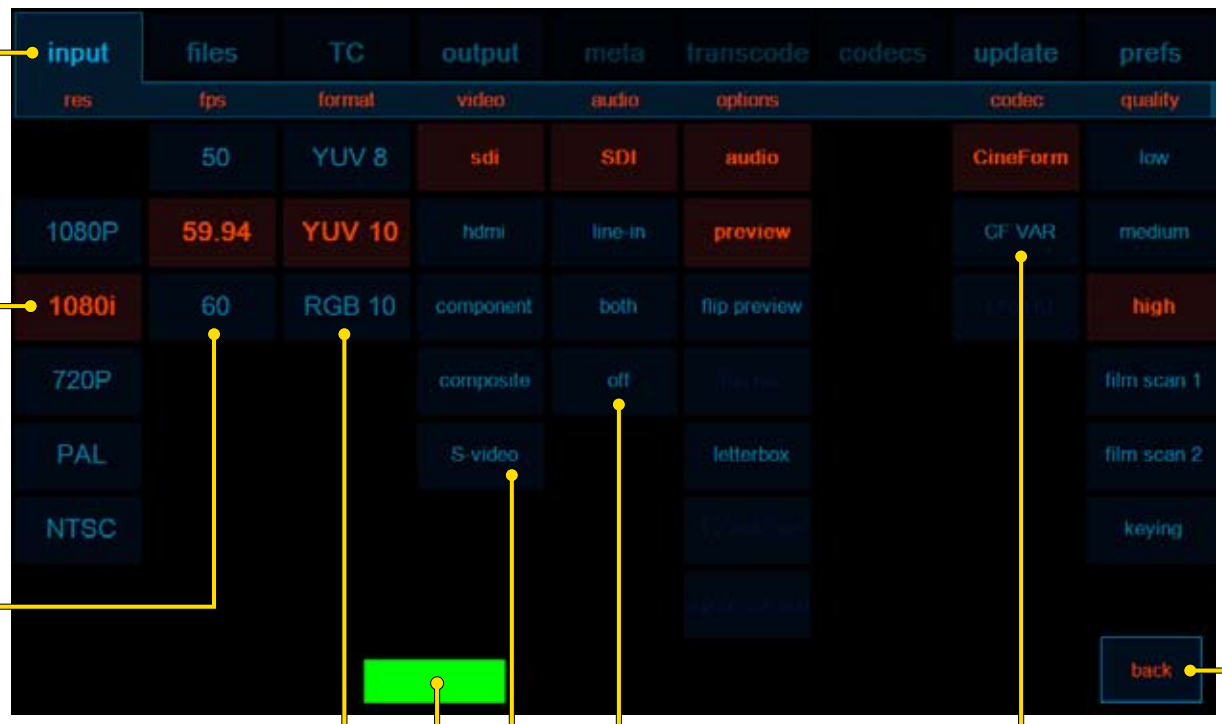
VIDEO AT WWW.CINEDECK.COM/SYNC

WARNING: On some cameras, the record settings DO NOT indicate the actual signal being sent. In some cases a signal is always sent at 1080i and 59.94 fps, despite camera settings such as 24F or 30F, due to camera sensor and circuitry design. Please be sure you are familiar with your camera and check all settings against the manual and technical specifications. Input settings on the Cinedeck EXTREME must match the true signal provided.

The SETUP screen is organized into tabs, which are selected by touching the titles along the top of the screen. Select the **input** tab at the top left of the SETUP screen.

Using the touchscreen, select the resolution of the signal being sent to the Cinedeck EXTREME. The adjacent options for fps will repopulate with all possible framerates for a given resolution.

In the next column, under the heading fps select the framerate of the signal being sent to the Cinedeck EXTREME.



Next, select the colorspace to be recorded.

NOTE:
The bright green square indicates a successful sync with your camera or other input source.

Select the video input in use.

Select the audio input in use.

Select the desired recording codec and quality.

NOTE:
Selecting **back** will return to the main (RECORD) screen. If the camera or other input is properly synced and the green indicator has lit, an input image will appear on the RECORD screen.

SHOOTING TOOLS (RECORD SCREEN)

The RECORD screen is the main interface for shooting with the Cinedeck EXTREME. It displays the current input image and surrounds it with all key information and shooting tools, including Cinedeck EXTREME system info, input settings, project, scene, and take names, media available, audio levels, timecode info, and all image composition, analysis, and focus tools.

NOTE: In addition to setting options by navigating the tabbed menus in the SETUP screen, the RECORD screen offers direct access to frequently used options, simply by tapping the related information display. For example, tapping the timecode display at the lower center of the RECORD screen brings you directly to the timecode tab of the SETUP screen.

VIDEO AT WWW.CINEDECK.COM/TOOLS

WARNING: The record button on the touchscreen does not respond to a quick tap, but requires a brief, stable touch to activate. This is to prevent accidentally starting or stopping a take. The hardware buttons on the unit enclosure mirror the features of the adjacent touchscreen controls on the RECORD screen; the hardware record button responds instantly.

Display of current input resolution, colorspace, framerate, and codec, including current bitrates. Tap to jump directly to the input tab of the SETUP screen for configuration.

Display of system info, including temperature in centigrade.

Display of audio input levels. If no audio appears, re-check audio connections and settings in the SETUP screen. Use the headphone jack on the right i/o panel to monitor audio.

Tap **play** to exit the RECORD screen and switch to the playback screen. This will cue up the most recently recorded take for immediate playback.

Tap **lock** to lock the touchscreen and prevent accidental inputs. To unlock, tap and slide the unlock button to the right.

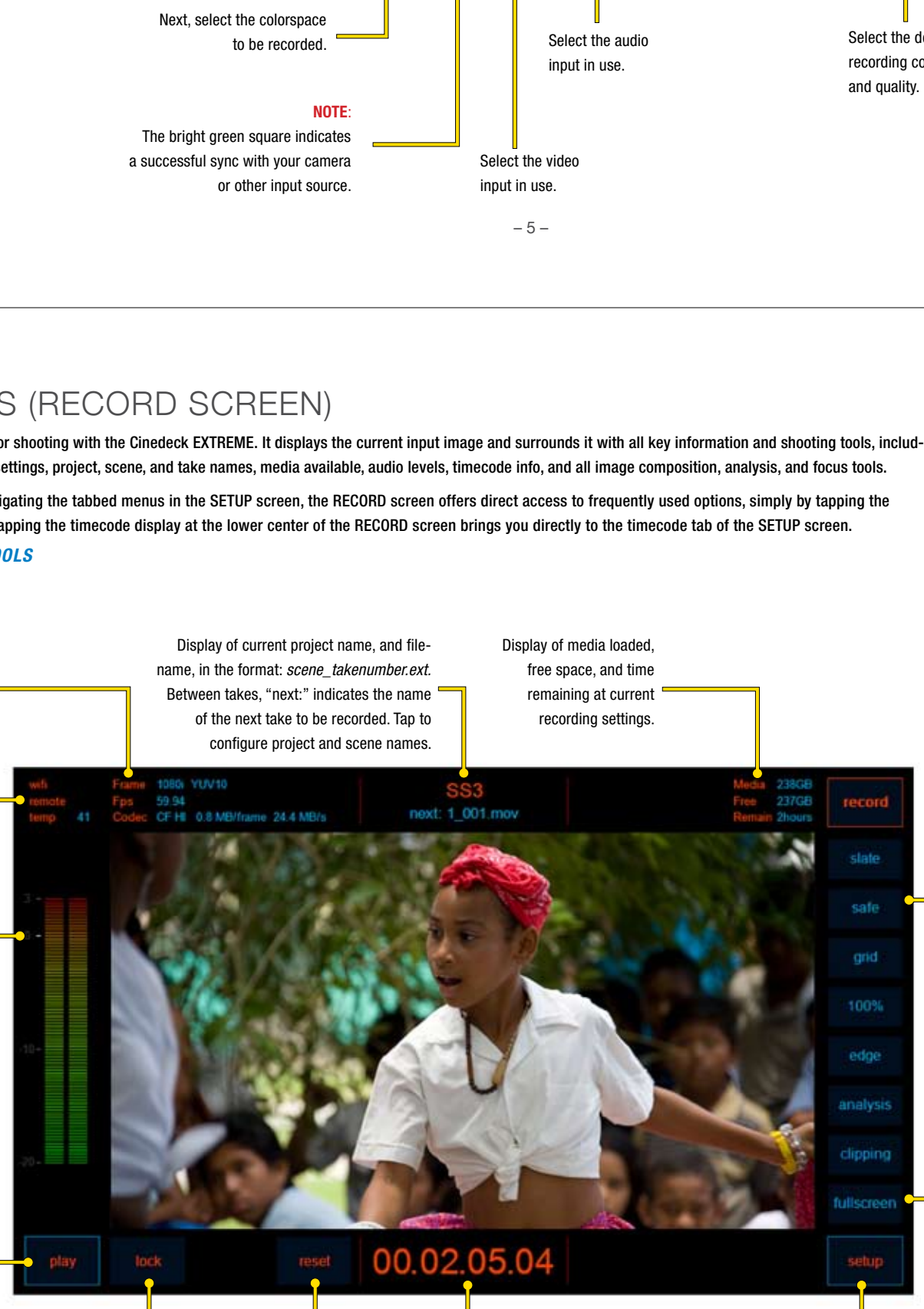
Tap **reset** to set the current timecode to 00.00.00.00. Once tapped, tap again and slide to the right to confirm and perform the reset.

Display of current project name, and filename, in the format: *scene_takenumber.ext.* Between takes, "next:" indicates the name of the next take to be recorded. Tap to configure project and scene names.

Display of current timecode. Tap to jump directly to the timecode tab of the SETUP screen to configure timecode options.

Display of media loaded, free space, and time remaining at current recording settings.

Tap **setup** to exit the RECORD screen and return to the SETUP screen.



Tap **safe** to toggle safe frame display on and off. Touch and hold **safe** to bring up and select alternate safe frame aspect ratios.

Tap **grid** to toggle grid display on and off. Touch and hold **grid** to bring up and select alternate grids.

Tap **100%** to toggle display zoom. This toggles between displaying the full frame of the source image and zooming to display the actual pixels of the source signal without scaling. This is useful for focus and detail verification. When zoomed in, use the touchscreen to drag anywhere in the display image. Other image analysis tools such as edge detection and clipping may be activated while zoomed in.

Tap **edge** to toggle displaying the input image with edge detection activated. This tool is used to verify focus.

Tap **analysis** to toggle the most recently used image analysis tool on and off. Touch and hold **analysis** to bring up and select between histogram, scope, and waveform tools. When selected, these tools display channel options on the left side of the screen, and below these, an **overlay** button appears to allow toggling between overlay and full-screen analysis image.

Tap **clipping** to toggle displaying the input image with **clipping** display activated. This tool is used to verify exposure. See PREFERENCES on page 7 to adjust clipping gamut.

Touch and hold **fullscreen** to toggle displaying the RECORD screen user interface as a frame around the input image and filling the Cinedeck EXTREME display with the input image. In fullscreen mode, touchscreen buttons are hidden when no touch is detected for a few moments. Touch the adjacent hardware button to exit fullscreen.

PLAYBACK TOOLS (PLAYBACK SCREEN)

When you enter the PLAYBACK screen the most recent take recorded is cued for review.

Display of current project and filename, in the format: *scene_takenumber.ext*
Tap to configure project or scene names or to load an alternate take into PLAYBACK.

Display of current take's resolution, colorspace, framerate, and codec, including bitrates. In playback mode these options are not configurable.

Image analysis, focus, and composition tools used in the RECORD screen are available while playing back takes, allowing the review of safe frames, grids, 100% zoom, edge detection, waveform, scope, histogram and clipping. Fullscreen is available in combination with these features at playback, allowing detailed inspection of takes during the shoot. See RECORD screen on page 6 for details of use.

Tap **back** to exit the PLAYBACK screen and return to the RECORD screen.

Tap **open** to load an alternate take into PLAYBACK.

Playback transport controls. From left to right: jump to beginning of take, rewind, play/pause, fast forward, and jump to end of take. Transport controls can be activated in conjunction with image composition, analysis, and focus tools.

in/out on (orange) brings up in and out points on the timeline, allowing selection of a portion of the take for review and playback. Slide the two vertical lines to the desired range.

Display of current take's timecode.

Tap to toggle play mode to ping pong, playing the take forward and backwards. Can be used in combination with in/out points.

Tap to toggle play mode to looping, playing the take repeatedly. Can be used in combination with in/out points.

PREFERENCES

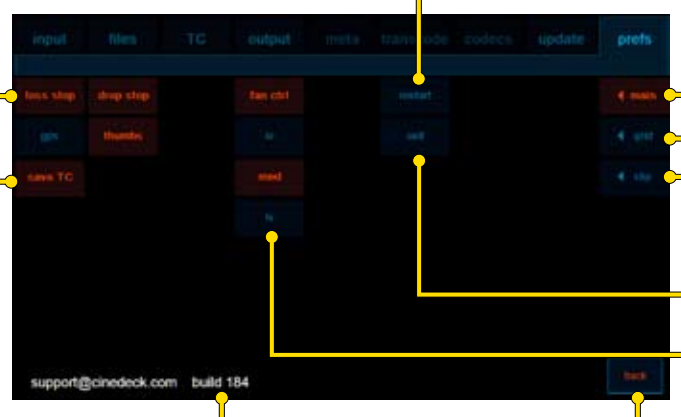
loss stop on (orange) indicates that the unit will stop recording when loss of signal is detected. Default is on.

gps on (orange) enables writing GPS data from Garmin USB GPS devices to file metadata. Currently the Garmin 18x GPS antenna is the only tested device.

save TC on (orange) sets the unit to record the current time-code after each take so that it can be restored if the software is restarted, allowing consistent project timecode between recording sessions. Framerate settings must be consistent to ensure consistent timecode between sessions.

drop stop on (orange) indicates that the unit will stop recording when dropped frames are detected. Default is on, except in cases where input signal is known to be unreliable but it is desirable to continue recording regardless.

thumbs on (orange) indicates that file manager in PLAYBACK mode will display thumbnails for each take. Default is on, making navigation and selection easier.



restart reinitializes the Cinedeck EXTREME software. This option is provided to clear memory during extremely long recording sessions. To preserve current project timecode during the restart, ensure that **save tc** (left) is enabled.

Tap **main** to display main preferences page (shown here).

Tap **grid** to display grid customization preferences page. This allows user control of shade and opacity of the grid and safe frame overlays on the RECORD and PLAYBACK screens.

Tap **clip** to display clipping customization preferences page. This allows user setting of the luma value that activates the red warning areas when clipping is enabled on the RECORD and PLAYBACK screens. Higher values show only pixels that approach clipping.

Tap to exit to OS for access to functionality not directly supported via the Cinedeck EXTREME user interface.

Fan control defaults to off. Fan control reduces fan speed during active recording in order to reduce noise when needed for quiet takes. Tap **fan ctrl** to turn fan control on, and select a fan speed to step down to during takes. Fan control reduces noise at the expense of allowing the system to heat up. At 90 degrees C, the fan will return to full speed regardless of this setting.

Displays the build number of your Cinedeck EXTREME software. This number will be an important reference for any support issues.

Tap **back** to return to the RECORD screen.

FILE MANAGEMENT IN RECORD

VIDEO AT WWW.CINEDECK.COM/FILES

Displays project name. Tap once to switch to a different project. Tap again to access a touchscreen keyboard to edit the project name. Tap **X** and slide the confirmation bar to the right in order to delete the project and all scenes and takes contained within it.

Displays scene name. Tap once to switch to a different scene. Tap again to access a touchscreen keyboard to edit the scene name. Tap **X** and slide the confirmation bar to the right in order to delete the scene and all takes contained within it.

Tap **new project** to create a new project. Tap **new scene** to create a new scene. New projects and scenes appear in the browser above with a numerical name generated by auto-incrementing. Tap them, as above, to rename.

Displays the next take number to be recorded. Take numbers auto-increment.

Tap **back** to exit the SETUP screen and **files** tab and return to the RECORD screen.

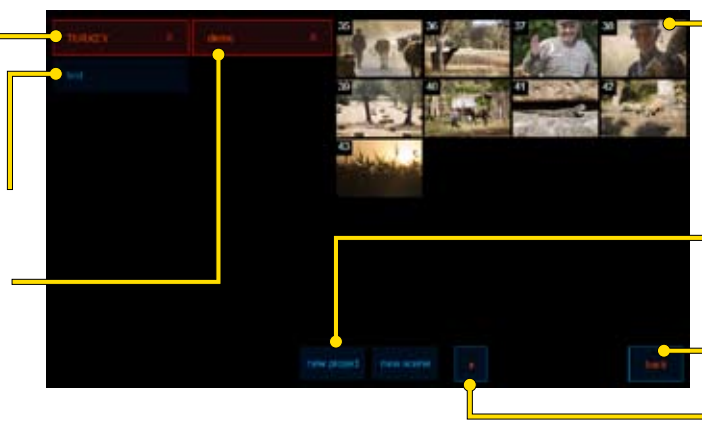
FILE MANAGEMENT IN PLAYBACK

VIDEO AT WWW.CINEDECK.COM/FILES

Displays project name. Tap once to switch to a different project. Tap again to access a touchscreen keyboard to edit the project name. Tap **X** and slide the confirmation bar to the right in order to delete the project and all scenes and takes contained within it.

Projects and scenes other than the currently selected ones are displayed in blue. Tap to select them as current.

Displays scene name. Tap once to switch to a different scene. Tap again to access a touchscreen keyboard to edit the scene name. Tap **X** and slide the confirmation bar to the right in order to delete the scene and all takes contained within it.



Displays takes within the current project and scene, displaying thumbnail images if preferences are set to display them. Tap on a take to cue it on the PLAYBACK screen for review.

Tap **new project** to create a new project. Tap **new scene** to create a new scene. New projects and scenes appear in the browser above with a numerical name generated by auto-incrementing. Tap them, as above, to rename.

Tap **back** to exit the playback file manager and return to the PLAYBACK screen.

Tap **X** to enter delete mode, which allows you to delete individual takes. In delete mode, each take has an **X** on it. Tap on an **X** and slide to confirm to delete an individual take.

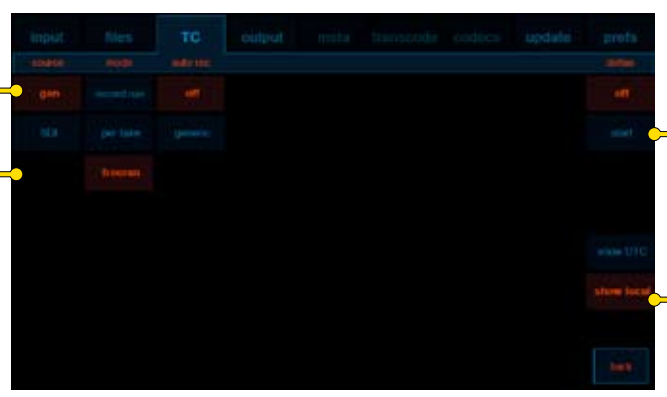
TIMECODE

VIDEO AT WWW.CINEDECK.COM/TIMECODE

source indicates the timecode source. When **gen** is active (orange) the Cinedeck unit generates timecode internally. When **SDI** is active (orange) the unit is set to receive timecode over the SDI input. Be sure your camera or other device is capable of generating timecode and is configured to do so in **SDI** mode.

mode indicates timecode mode when gen is active. There are three options. **record run** starts timecode when recording is active and pauses it between takes. The timecode for each new take begins where the previous take left off. **per take** starts timecode when recording is active, but resets the timecode to 00:00:00:00 for each new take. **free run** keeps timecode running continuously at all times, regardless or recording or take activity.

auto rec may be used to automate recording on the Cinedeck EXTREME when the source for timecode is set to **SDI** and the timecode being received is in record run mode. When the timecode being received by the Cinedeck EXTREME changes value, recording begins. Tap **generic** to enable.



Tap **start** under the **deltas** heading to set an arbitrary time as the start point for internally generated timecode. This can be used to differentiate between media units (SSDs) as was traditionally done with tapes.

Tap **show UTC** to change the timecode display on RECORD and PLAYBACK screens to show universal time (GMT) in place of timecode. This data as well as normal SMPTE timecode is written to take metadata.

Tap **show** loc to change the timecode display on RECORD and PLAYBACK screens to show local time in place of timecode. This data as well as normal SMPTE timecode is written to take metadata.

SETTING UP NEW SSD MEDIA FOR USE WITH THE CINEDECK EXTREME

SSD media purchased from any other vendor must be prepared before use with the Cinedeck EXTREME to disable write caching on the device and to format it using the correct file system. All data on the SSD will be lost in preparation for use with the Cinedeck EXTREME. Perform these functions on the Cinedeck EXTREME itself, rather than attempting to perform them on a computer; this is necessary to ensure proper functionality.

WARNING: Failure to follow these procedures will result in improper operation and may cause future data loss in operation.

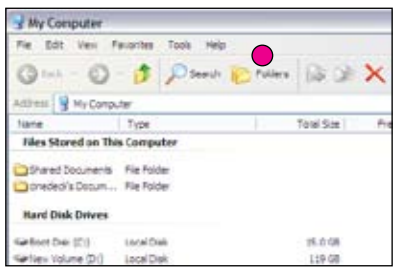
Boot up the Cinedeck EXTREME, quit to the OS by tapping **exit** in the main PREFERENCES page. (See PREFERENCES on page 7 for details.) Insert the new SSD to prepare, and follow the instructions below. In order to context-click using the touchscreen, hold down on one spot. (This is equivalent to right-clicking with a mouse.)

NOTE: A USB mouse can be connected to the Cinedeck EXTREME to perform these functions without using the touchscreen.

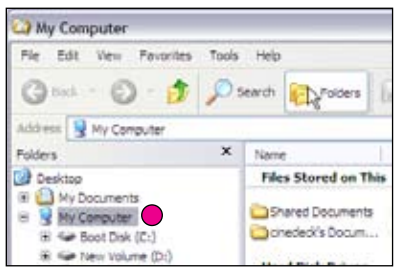
Follow these steps to prepare a new SSD:

1. Click **start**.

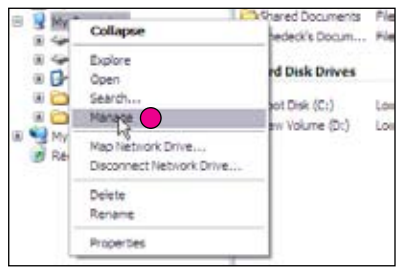
2. Click **My Computer**.



3. On the window that appears, click the large button labeled **Folders**.

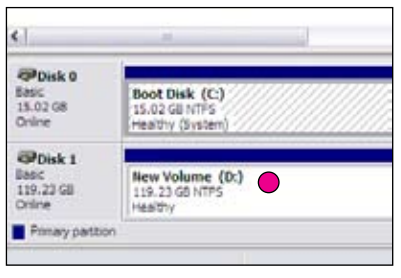


4. In the window below, context-click (by holding in place on the touchscreen or right clicking with an attached mouse) on **My Computer**.

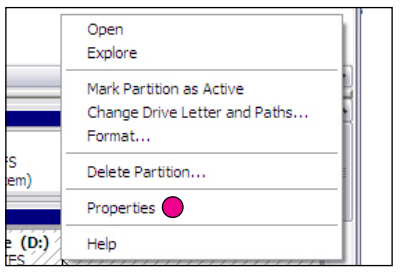


5. In the context menu that appears, click **Manage**.

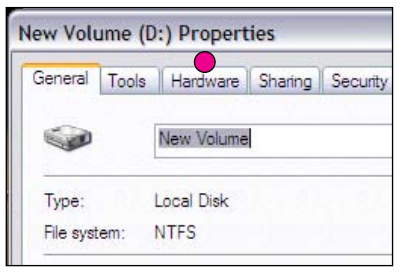
6. In the window that appears, click **Disk Management**.



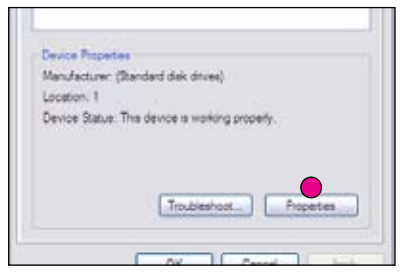
7. In the pane that appears, context-click on Disk 1 (NOT Disk 0), your new SSD. Confirm that size of the device to make sure it is the SSD and not the onboard unit storage.



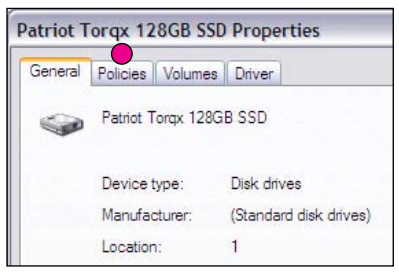
8. In the context menu that appears, click **Properties**.



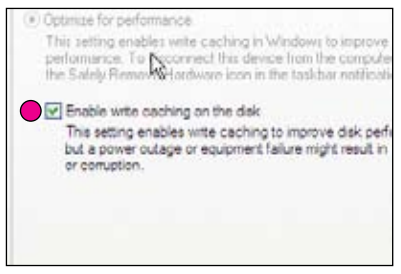
9. In the window that appears, click the **Hardware** tab.



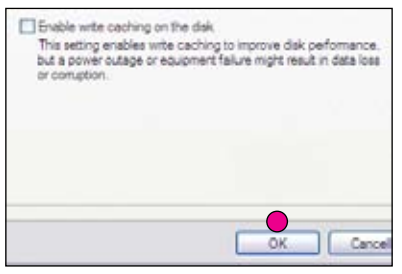
10. At the bottom of the **Hardware** tab, click **Properties**.



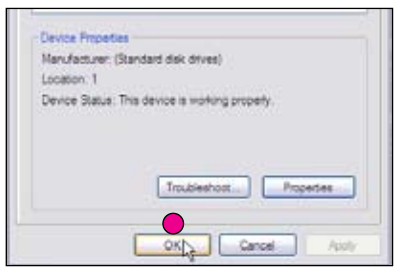
11. In the window that appears, click the **Policies** tab.


Optimize for performance
Enable write caching on the disk
This setting enables write caching to improve disk perf
but a power outage or equipment failure might result in
or corruption.

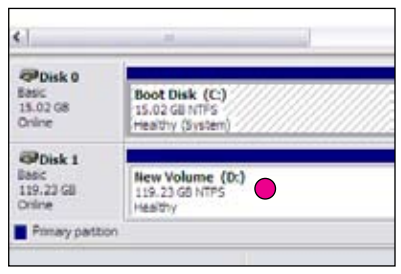
12. On the **Policies** page, UNCHECK **Enable write caching on the disk**.


Enable write caching on the disk
This setting enables write caching to improve disk performance,
but a power outage or equipment failure might result in data loss
or corruption.
OK
Cancel

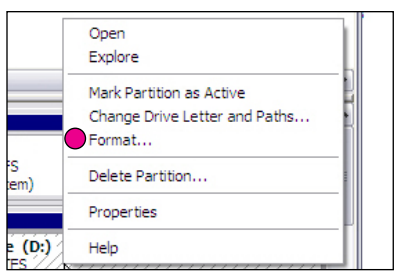
13. With **Enable write caching on the disk** now UNCHECKED, click **OK** on the bottom of the window to confirm.



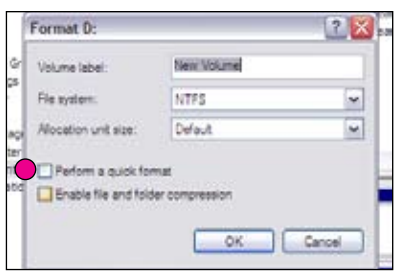
14. Click **OK** on the bottom of the **Hardware** page to confirm.



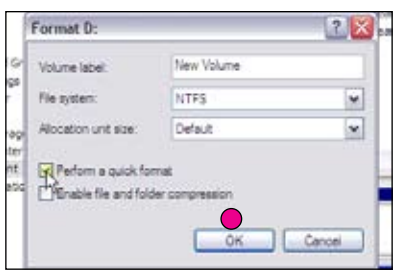
15. Context-click again on Disk 1 (NOT Disk 0), your new SSD. Confirm that size of the device to make sure it is the SSD and not the onboard unit storage.



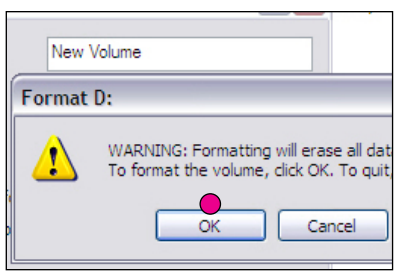
16. In the context menu that appears, click **Format**.



17. In the window that appears confirm that File system is set to NTFS, and check the box for **Perform a quick format**.
WARNING: This is not optional for SSD drives. You must perform a quick format.



18. With **Perform a quick format** checked, click **OK** to confirm.



19. In the window that appears, click **OK** again to format the SSD. Formatting the SSD will be rapid.

The SSD is now set for proper operation and formatted for use with the Cinedeck EXTREME. You may close all windows and relaunch the Cinedeck software by double tapping on the cinedeck.exe application on the desktop, or by restarting the unit.

UPDATING THE CINEDECK EXTREME (SETUP SCREEN)

Registered users will receive email notices regarding important software updates to the Cinedeck platform. On a separate computer, follow the link provided, and download the software update file. It will be in a .zip format. Copy the update file to the top level of a USB thumb drive. Do not put it in a folder or sub folder. Remove any other media, including SSD drives, from your Cinedeck EXTREME. You are now ready to perform the software update.

WARNING: Do not use the USB thumb drive that came with the Cinedeck EXTREME. This is for restoring the unit only.

Insert the thumb drive into a USB port on the Cinedeck EXTREME, as shown.

From the Cinedeck interface, go to the SETUP page, and tap the **update** tab. Tap “update” in the center of the screen. Do not power off the unit during the update.

The software will restart, completing the software update. Remove the thumb drive from the Cinedeck EXTREME. The update can be confirmed by checking the software build number in the **prefs** tab of the SETUP screen.

RESTORING THE CINEDECK EXTREME TO FACTORY SETTINGS

Power the unit down. Remove any media, including SSD drives. Insert the provided system restore thumb drive into a USB slot.

Power up the Cinedeck EXTREME. Auto-restore will run. Do not power off the unit during the restore. When the restore is done, the unit will automatically restart.

Remove the thumb drive immediately on restart. The system will boot as usual, and you will be prompted to accept the End User License Agreement.
Any updates will need to be reinstalled following the “update software” instructions.

REGISTER YOUR CINEDECK EXTREME: **www.cinedeck.com/registration**

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